Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Restoring Internet Freedom	)	WC Docket No. 17-108
	)	
Bridging the Digital Divide for Low-income Consumers	)	WC Docket No. 17-287
	)	
Lifeline and Link up Reform and Modernization	)	WC Docket No. 11-42
	)	

COMMENTS OF THE ELECTRONIC FRONTIER FOUNDATION

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Submitted by:
Electronic Frontier Foundation

Corynne McSherry
Ernesto Falcon
Kit Walsh
Katherine Trendacosta
Samantha Phillips
815 Eddy St
San Francisco, CA 94109
(415) 436-9333

I. Users Need Public Safety Net Neutrality Protections During Times of Crisis

During emergencies, the ability to contact public safety entities is vital, as is access to accurate, authoritative information. While network management during an emergency can in theory be necessary to handle a surge in usage by the public, disruptions imposed to extract additional profits are even more harmful and potentially dangerous than usual.

A. In Emergencies, Users Need to Communicate With Public Safety Workers and It Is Essential to Prevent Throttling and Other Profit-Motivated Disruptions

The Internet is a critical means of communication during a crisis, more so every year. Emergency alerts are sent via email, public safety information is shared on social media, official websites, and via text messaging. Therefore, it is not only first responders and other emergency workers who need free access to the Internet, but the public looking for information about evacuation zones, quarantines, and other emergency services.

A vast number of Americans, especially vulnerable populations, are reliant on mobile devices for Internet access. About 20 percent of Americans are "smartphone-only": they do not have a home broadband subscription, only a smartphone.[1] Black, Hispanic, lower-income, young, and rural Americans are all more likely to rely on their smartphones for Internet access than their peers.[2] Cell phones and the Internet are more and more likely to be how Americans get in touch with their government and emergency services.

Without net neutrality, ISPs can not only choose what websites users can access and how fast they can access them, they can also choose what applications they can use to do so. As more and more Americans rely on the Internet for communication, it is harmful to public safety – not to mention innovation, competition, speech, and privacy – if ISPs can block a communication app merely because it will cut into their profit.

Unfortunately, we have evidence that, absent net neutrality protections, that is exactly what they will do. In an emergency, Americans need to be able to call emergency services, and it can't matter whether this is a traditional phone call or an Internet-enabled call. We have evidence of ISPs violating net neutrality based on this exact distinction. In 2005, Madison River, a North Carolina ISP, blocked customers from using the "Voice over Internet Protocol" (VoIP) service Vonage.[3] In other words, the Internet provider prevented users from making use of a service that allowed them to make calls over the Internet. From 2007-2009, AT&T prevented Apple from making certain VoIP apps (such as Skype) available on the iPhone, also trying to prevent users

[1] *Internet/Broadband Fact Sheet*, PEW RESEARCH CENTER (June 12, 2019), https://www.pewresearch.org/internet/fact-sheet/internet-broadband.

[2] Monica Anderson, *Mobile Technology and Home Broadband 2019*, PEW RESEARCH CENTER (June 13, 2019), https://www.pewresearch.org/internet/2019/06/13/mobile-technology-and-home-broadband-2019.

[3] Lawrence Lessig, *Voice-Over-IP's Unlikely Hero*, WIRED (May 5, 2005, 12:00 PM), https://www.wired.com/2005/05/voice-over-ips-unlikely-hero.

from making calls "over-the-top" of its service.[4] In 2009, this pattern was repeated with Google Voice.[5]

In each of these cases, users were prevented from making calls because ISPs denied them access to services that were, in some cases, free. And the denial was not for any network management purpose; the motivation was profit, by way of preventing users access to competitors.

Internet access without restriction is also important for public safety workers trying to get information from the public. Public safety entities can learn essential information about what is happening in a disaster from what the public shares with them, and the more that is available for analysis, the greater the chance that an accurate picture will be formed.[6] For example, after the 2011 earthquake in Haiti, online workgroups, NGOs, private companies, and civilians crowd-sourced maps that were used by first-responders on the ground.[7] Any one of these groups facing throttling, blocking, or other profit-driven measures by their ISPs that would restrict their access to information and their ability to share it would compromise the effort. Profit-based disruptions that prevent users from sharing information online could also make public safety responses less effective.

Without net neutrality protections, ISPs can block and otherwise interfere with services for any reason. But in emergencies, Americans need to be able to contact public safety entities by whatever means they have access to, be it via Internet browser, smart phone, app, or traditional phone call. In fact, there is evidence that post-disaster, having people using as many diverse contact methods as possible is preferable.[8] Any artificial disruption can prevent Americans from getting help at critical times.

B. In the Same Way That Users Need to Communicate With Public Safety Entities, Those Entities Need to Communicate With Users

The same concerns about users needing to contact public safety also apply to public safety needing to contact users. It is unfortunately common for false information to spread online and impede the public's ability to get trustworthy and accurate information.[9] Accurate information must be shared online as well; it cannot be absent from the conversation. In other words, traditional ways of sharing information, such as television and radio news reports, cannot be the

[4] Philip Elmer-Dewitt, *Group Asks FCC to Probe iPhone Skype Restrictions*, FORTUNE (Apr. 3, 2009, 1:12 PM), https://fortune.com/2009/04/03/group-asks-fcc-to-probe-iphone-skype-restrictions/.

[5] Erica Ogg, *Apple Blocks Google Voice App for iPhone*, CNET (July 28, 2009, 1:25 PM), https://www.cnet.com/news/apple-blocks-google-voice-app-for-iphone/.

[6] Christian Reuter & Marc-André Kaufhold, *Fifteen Years of Social Media in Emergencies: A Retrospective Review and Future Directions for Crisis Informatics*, 26 J. CONTINGENCIES AND CRISIS MGMT. 41, 46-47 (2018).

[7] Tomer Simon, Avishay Goldberg & Bruria Adinia, *Socializing in Emergencies—A Review of the Use of Social Media in Emergency Situations*, 35 INT'L J. OF INFO. MGMT. 609, 613-14 (2015).

[8] Neal Ungerleider, *Why Your Phone Doesn't Work During Disasters—And How to Fix It*, FAST COMPANY (Apr. 17, 2013), https://www.fastcompany.com/3008458/why-your-phone-doesnt-work-during-disasters-and-how-fix-it.

[9] Kate Kelland, *Fake News Makes Disease Outbreaks Worse, Study Finds*, REUTERS (Feb. 13, 2020), https://www.reuters.com/article/us-health-fake/fake-news-makes-disease-outbreaks-worse-study-finds-idUSKBN208028.

only way public safety entities communicate. Three in ten Americans describe themselves as "constantly" online, and the best way to reach them will be for public safety communication to also take place online.[10]

Those that rely on smartphones for Internet access are also vulnerable to the practice of zero-rating, a practice where an ISP selectively favors particular data by exempting it from calculation of a user's data cap or from excess usage charges. This practice can be a profit-motivated disruption when service providers favor their own content providers or those who pay the carriers money to do so.[11]

This practice, and any practice that preferences some data over others, can distort the information available to Internet users. Low-income and rural users can end up spending most of their Internet time on zero-rated services, which limits access to information to what is on those services. For example, in places where Facebook was zero-rated, users have ended up concentrating *most* of their Internet time on Facebook.[12] Facebook then becomes a single point of failure for intentional and unintentional distortions of the information available to users – as well as enhancing the ability of the service to collect private data. People needing information, trapped in the patterns established by non-net neutral practices, will be less likely to visit official public safety sources and get information from them, and may become more vulnerable to disinformation.

C. Public Safety Is Threatened by Profit-Motivated Disruptions of Internet Service

The COVID-19 pandemic has illustrated ways in which unfettered Internet access is essential during an emergency. Workplaces and schools closed, as decreasing interaction between people was proven to slow the spread of the disease. This forced workplaces to shift to work from home, increasing the use of Internet-based services like videoconferencing. Schools also started virtual classrooms. All of this vastly increased Internet use.[13]

People being unable to work or attend school because of data caps was a major concern. However, many ISPs suspended data caps during the crisis, as the caps were artificially imposed for profit purposes, not because they were required to manage the networks.[14]

[10] Andrew Perrin & Madhu Kumar, *About Three-In-Ten U.S. Adults Are 'Almost Constantly' Online*, PEW RESEARCH CENTER (July 25, 2019), https://www.pewresearch.org/fact-tank/2019/07/25/americans-going-online-almost-constantly/.

[11] Corynne McSherry, Jeremy Malcolm & Kit Walsh, *Zero Rating: What It Is and Why You Should* Care, EFF (Feb. 18, 2016), https://www.eff.org/deeplinks/2016/02/zero-rating-what-it-is-why-you-should-care.

[12] Denelle Dixon, *Mozilla Releases Research Results: Zero Rating Is Not Serving as an On-Ramp to the Internet*, MOZILLA (July 31, 2017), https://blog.mozilla.org/blog/2017/07/31/mozilla-releases-research-results-zero-rating-not-serving-ramp-internet/.

[13] Rich Miller, *Internet Exchanges See Record Levels of Network Traffic*, DATA CENTER FRONTIER (Mar. 11, 2020), https://datacenterfrontier.com/internet-exchanges-see-record-levels-of-network-traffic/.

[14] Karl Bode, *Comcast Suspends Data Caps in Wake of Coronavirus,* VICE (Mar. 13, 2020, 3:49 PM), https://www.vice.com/en_us/article/m7qk4n/comcast-suspends-data-caps-in-wake-of-coronavirus.

In an emergency where many Americans are being required to stay home, practices that are based in profit maximization rather than reasonable network management could end up being catastrophic. Small businesses would struggle to cover costs for remote workers suddenly running into data caps and overage fees and workers could find themselves out of a job if they cannot pay for more expensive plans to work from home.

Consumers being unable to have full access to the Internet during emergencies because of a billing practice creates public safety concerns. During an emergency, any American could find themselves in the same situation as the Santa Clara Fire Department during the Camp Fire. If a consumer were near the data cap of their Internet plan when an emergency occurred, they too could find themselves unable to get online properly. This could prevent them from getting information they need or from telling public safety responders something they need to know.

D. Commercial Prioritization Would Not Improve the Network for Public Safety

The FCC's request for comments assumes that prioritization arrangements will result in network improvements. EFF is not aware of any evidence to support that assumption, and it is counter-intuitive given that prioritization operates by slowing down competing traffic, not somehow boosting desired traffic.[15] The ability to charge more for unimpeded service is most valuable when the ISPs limit supply; it thus reduces the incentive to invest in additional infrastructure. To the extent the Commission is suggesting that prioritization arrangements will allow users – including public service users – to pay for upgrade services in times of emergency, any such arrangement is a strange way to support the public interest. It seems particularly outrageous where, as in most communities, users have little to no choice in providers.

Instead, service providers should stand ready to, and be required to, support the rapid and reliable transmission of public safety related communications as part of their obligations as good corporate citizens. As discussed, such communications will not be confined to the providers of emergency services; individual users will also need to communicate to identify high risk areas, obtain emergency services, and assist loved ones.

II. The Commission's Duty to Protect Public Safety Means It Cannot Simultaneously Disclaim Authority Over Broadband Providers While Asserting That States Also Have No Authority

In California, the events of Santa Clara as illustrated by Fire Chief Bowden's declaration[16] and further details highlighted by Santa Clara County's investigation and hearing[17] have underscored the need for baseline rules for public safety. Going without public safety rules for broadband could risk a repeat of firefighters using their personal devices to connect public safety equipment

[15] Samuel Raisanen, *A Note Regarding Prioritization on Congestible Networks* (Aug. 2, 2015), *available at* https://www.scirp.org/html/2-1500772_60096.htm.

[16] Declaration of Fire Chief Anthony Bowden, *Mozilla Corp. v. FCC*, 940 F.3d 1 (D.C. Cir. 2019) (No. 18-1051).

[17] The County of Santa Clara, California Finance and Government Operations Committee Special Meeting, Report 93991 (Oct. 31, 2018, 12:00 PM) *available at* http://sccgov.iqm2.com/Citizens/Detail_Meeting.aspx?ID=10777.

in the middle of a statewide emergency in order to compensate for throttling by their BIAS provider.[18] The need for rules is crystal clear, but who sets the rules and under what authority remains to be resolved by the FCC.

The D.C. Circuit Court found that the FCC had a mandated duty to promote "safety of life and property through the use of wire and radio communications"[19] and held that the agency's lack of consideration of its duty was arbitrary and capricious. In the absence of federal oversight and rules, the states have rapidly begun to fill the void in order to carry out their own public safety duties.

The FCC cannot pretend that the lack of authority to declare baseline rules for broadband companies and disclaimer of authorities to penalize companies that engage in unjust and unreasonable behavior is legally sustainable with its public safety duty. As a result, the agency must remedy where the Restoring Internet Freedom Order fell short in order to pass muster with the D.C. Circuit's instructions.[20]

This leaves the FCC with two options. Either the FCC reverses course because it cannot properly articulate a regulatory means to carry out its public safety duty under its Title I authority, or the FCC affirmatively declares that the agency finds that states have clear jurisdiction to regulate the business practices of BIAS providers for public safety purposes. Under the first option, the FCC could sustain its position that it has preemption authority over state public safety rules that impact interstate commerce because of its broad authority over telecommunications carriers, while leaving intrastate regulation with the states. Under the second option, the FCC's affirmative deference to state regulation would be sustainable under the premise that each state has unique public safety needs from weather events, population, and other state specific issues. In this scenario, the FCC must affirmatively declare that it does not have preemptive authority under its Title I legal theory in order to remove uncertainty from local jurisdictions establishing protections for users and public safety entities.

A. Option 1: FCC Reclassifies Broadband Internet Access Service Providers Back into Telecommunications Carriers and Establishes Federal Public Safety Rules to Carry Out Its Mandate

If the agency holds firm to the belief that a "uniform set of federal regulations" rather than separate state and local requirements[21] is a superior means of regulating BIAS providers, then it must reverse its reclassification decision. As the D.C. Circuit laid bare, classifying BIAS providers as Title I entities means the FCC holds no blanket preemptive power over the action of states,[22] which will lead to states filling the void the FCC itself created. While some may believe

[18] Declaration of Fire Chief Anthony Bowden, *supra* note 15, at 4. (Evidence submitted to the D.C. Circuit showed that in light of Verizon's throttling of firefighters during a statewide emergency forced firefighter personnel to utilize "their own personal devices to provide the necessary connectivity and data transfer capability" required by their public safety equipment.)

[19] 47 U.S.C. § 151 (2012).

[20] *Mozilla Corp. v. FCC*, 940 F.3d 1, 59-63 (D.C. Cir. 2019).

[21] *In re Restoring Internet Freedom*, 33 FCC Rcd. 311, 426-47 (2018).

[22] *Mozilla*, 940 F.3d at 74-75.

conflict preemption will yield some sort of meaningful restraint on state regulation, it is likely such preemption efforts will equally fail because conflict preemption requires something to exist federally to be in conflict. Under Title I, there is no meaningful conflict in terms of public safety duties or obligations because they do not exist.

The likely scenario for most legal challenges to state authority by BIAS providers over public safety rules will be decided under the Dormant Commerce Clause, as in California's litigation over state net neutrality protections.[23] This is because the absence of federal law under Title I opens a fairly wide field for debate on state rules that burden interstate commerce but lack a federal rule or even a closely related federal rule. Given that already ample evidence exists as to the life and safety aspects of BIAS during state emergencies, the states will have fairly strong government interest arguments for each challenge that courts will sustain under the requisite *Pike* balancing tests.[24]

But the gap filling by state regulators and legislatures will only happen under a Title I approach. Should the FCC reinstate its Title II authority, the agency would have ample power to claim conflict and field preemption of state rules. Courts would have little difficulty in finding that Congress gave broad authority to the FCC to establish federal rules for telecommunications providers, giving the FCC a fairly clear path towards establishing a uniform federal standard. Consequently, incidents such as Verizon's throttling of firefighters in Santa Clara would clearly be in violation of their duties as telecommunications carriers and the FCC could have taken immediate action to remedy the situation. But because the FCC has effectively sidelined itself (which the D.C. Circuit made clear is impermissible), the California legislature in AB 1699 (Levine) passed a public safety-oriented law to prevent a repeat of the Santa Clara incident and fill the gap the FCC created (notably facing virtually no opposition from wireless carriers).[25]

B. Option 2: The FCC Maintains Course under the Restoring Internet Freedom Order but Affirmatively Declares States Have Clear Jurisdiction to Regulate Broadband Internet Access Service Providers

In the alternative, the FCC can retain Title I authority but has to reverse its asserted position against state-based authority to regulate BIAS for public safety purposes. The FCC can accomplish this by affirmatively declaring that it does not have the authority to preempt 50 state public utility commissions and legislatures and allow each state to chart its own course.

Such an approach makes sense given the unique situations states face in dealing with public safety issues. For example, California annually has "fire season" that is driven by "warmer spring and summer temperatures, reduced snowpack, and earlier spring snowmelt" and last an estimated "75 days across the Sierras."[26] States like Florida regularly deal with hurricanes that present a series of different challenges to maintain BIAS connectivity and resiliency. Each state's

[23] Plaintiff's Motion for Preliminary Injunction at 2, *Am. Cable Ass'n, v. Becerra,* No. 18-01552 (E.D. Cal. filed Oct. 3, 2018).

[24] *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970).

[25] Press Release, Assembly Member Marc Levine, Levine Measure to Prevent Data Throttling of First Responders Approved by State Legislature (Sept. 10, 2019) (on file with author).

[26] 2020 Incident Archive, CAL FIRE, https://www.fire.ca.gov/incidents/2020/ (last visited Apr. 6, 2020).

Public Utility Commission would potentially be better equipped to understand the local needs of their jurisdiction and how best to translate those needs into public safety rules applied to local BIAS providers.

Furthermore, clarifying state authority to regulate BIAS providers within their backyards is expressly supported in the Communications Act.[27] States have long held the power to regulate "charges, classifications, practices, services, facilities, or regulations for or in connection with intrastate communications service" and state public safety rules will inherently be closely tied to activity within the state itself. Contrary to assertions that BIAS services are inherently global, a great many issues states worry about in the public safety context such as resiliency, local connectivity to towers and wired services, location of infrastructure for preparedness purposes, and ensuring unfettered user access can be cabined off as intrastate rules.

III. Clear Uniform Application of Pole Attachment Rights is Essential to Promote Universal Fiber to the Home Deployment

The D.C. Circuit correctly rejected the FCC's arbitrary and capricious decision to eliminate pole attachment rights for BIAS providers who are not also simultaneously operating as cable television or telephone providers. If the FCC's fundamental goal is to further advance the deployment of broadband services, creating an uneven playing field between legacy incumbents and new entrants has the exact opposite effect. While it is true that states have the authority to reverse preempt the FCC[28] and establish their own local power to govern the rights of way, many states have not. This has forced new entrants with limited influence to lobby for equal access to infrastructure to provide BIAS services, most specifically fiber to the home or high capacity wireless services reliant on fiber, and has stalled their deployment plans. Unsurprisingly, legacy incumbents with special privileges already in place fight these legislative efforts to broaden local authority to include new entrants.

Even when successful, advocates such as EFF seeking to remove barriers to competitive broadband deployment had to overcome substantial opposition from the same BIAS providers that support the Restoring Internet Freedom Order.[29] Both sides understand that meaningful progress towards universal fiber for all Americans will require the FCC, states, and local governments to act.

Many EU nations have surpassed the United States in fiber infrastructure by ensuring access to local rights of way for all BIAS providers, including open access or 'dark fiber' providers who provide capacity for other BIAS operators. In the EU, there has already been a far reaching multi-year inquiry and effort by the governments to determine how best to lower the cost of entry by better management of local rights of way and reducing the infrastructure costs of new entrants

[27] 47 U.S.C. § 152 (2012).

[28] 47 U.S.C. § 224 (2012).

[29] Ernesto Falcon, *Victory! California's Legislature Pulls AT&T and Comcast Bill That Protected Their Monopolies*, EFF (Sept. 10, 2019), https://www.eff.org/deeplinks/2019/09/victory-californias-legislature-pulls-att-and-comcast-bill-protected-their.

through sharing policies.[30] As a result, the EU enjoys a brand new vibrant open access fiber industry that seeks to connect the entire zone to fiber optics.[31] South Korea, the world leader in broadband access today, got to that position via similar infrastructure policies.[32]

Even massive corporations like Google have been prevented from effectively deploying their fiber network when, for instance, AT&T refused to allow Google's infrastructure to attach to poles that AT&T owned in Texas.[33] If Google, one of the world's largest corporations, couldn't overcome private incumbent barriers, what hope do local governments and small BIAS providers have without legal protection to promote competition?

Lastly, one of the most revolutionary changes in telecommunications is the birth of an industry that does not directly sell broadband access, but rather is treating fiber as infrastructure and connecting homes and business with an open access approach. In Utah, a multi-city effort known as Utopia is universally deploying open access fiber in a financially sustainable way and injecting competition for broadband services throughout the state.[34] At the same time construction of one of the largest private open access fiber networks is happening in Fullerton, California.[35] However, if we lack the policies and regulations that promote the entry of open access fiber into the market, these will be isolated efforts and we will miss a major opportunity to attract investment in 21st century infrastructure.

Such an outcome could be categorically disastrous for rural Americans. Rural markets are uniquely challenging because of spread out populations that make it difficult to recover the costs of building the infrastructure to connect all residents. However, new approaches to connecting those markets are proving fruitful, namely through supporting the construction of one fiber network that can aggregate demand from anchor institutions and retail broadband providers under an open access regime. One study even suggests that it is feasible that rural markets can be connected to fiber for zero subsidies if long-term, low-interest loans are offered and the fiber is

[30] *Access to Existing Physical Infrastructure*, EUROPEAN COMMISSION, https://ec.europa.eu/digital-single-market/en/access-passive-infrastructure (last updated July 10, 2018).

[31] *Wholesale & Open Access Operators Form Alliance to Accelerate Fiber Deployments*, BROADBAND WORLD NEWS (July 20, 2018) http://www.broadbandworldnews.com/document.asp?doc_id=744822.

[32] Jane Lee, *Why Does South Korea Have Faster Internet for a Cheaper Price Tag?*, PUBLIC KNOWLEDGE (July 19, 2017), https://www.publicknowledge.org/news-blog/blogs/why-does-south-korea-have-faster-internet-for-a-cheaper-price-tag; *see also* Ernesto Falcon, *Why is South Korea a Global Broadband Leader?*, EFF (Mar. 16, 2020), https://www.eff.org/deeplinks/2020/02/why-south-korea-global-broadband-leader.

[33] Jon Brodkin, *Why AT&T Says It Can Deny Google Fiber Access to Its Poles in Austin*, ARSTECHNICA (Dec. 16, 2013, 11:57 AM) https://arstechnica.com/tech-policy/2013/12/why-att-says-it-can-deny-google-fiber-access-to-its-poles-in-austin/.

[34] UTOPIA FIBER, https://www.utopiafiber.com/residential-pricing/ (last visited Apr. 6, 2020).

[35] *Construction of One of the USA's Largest Privately Funded Open Access Fiber Networks Commences*, YAHOO FINANCE (Nov. 25, 2019), https://finance.yahoo.com/news/construction-one-usas-largest-privately-130000393.html.

treated like an infrastructure project.[36] Such approaches are successful in countries like Ireland[37] and New Zealand[38] and hold tremendous promise, but will not be possible if the FCC does not establish equal rights to accessing the infrastructure.

[36] Benoît Felten & Thomas Langer, *Structurally Independent Broadband Infrastructure Can Solve Perceived FTTH Coverage Issues*, DIFFRACTION ANALYSIS (June 13, 2016), https://www.diffractionanalysis.com/services/white-papers/2016/06/structural-remedies-solve-rural-broadband-issue.

[37] *Over 300,000 Homes in Northern Ireland Now Enjoying the Benefits of Fibre Broadband*, MYNEWSDESK (Dec. 18, 2017, 11:48 AM), http://www.mynewsdesk.com/uk/btregions/pressreleases/over-300000-homes-in-northern-ireland-now-enjoying-the-benefits-of-fibre-broadband-2337783.

[38] Andrew Afflerbach, *The New Zealand Ultrafast Broadband Network: Flexible, Cost-Effective Open Access*, 2011 FTTH CONFERENCE & EXPO (Sept. 2011), http://www.ctcnet.us/NewZealandUltrafastNetwork.pdf.